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Technology Empowering Individuals

In the 20th century, humanity experienced fantastic transformations in every area of life, all as a result of technological progress. And, by all accounts, the pace of this incessant discovery is accelerating. Thus, what the 21st century holds for man remains to be seen, but the changes will undoubtedly be many and extreme. Many argue that as quantum computing, advanced robotics, and new mediums for content become available, humanity will lose touch with its cultural identity and become more focused than ever on searching for answers. But searches for progress and efficiency are not necessarily self-feeding desires; our technology can be used as a tool to calm the frenzied way in which we approach the world. Technology, rather than pushing man into a collective existence singularly focused on efficiency, will instead promote the importance of the individual.

As computers' databases grow larger, humans will take on a bigger role in choosing what information is important. In his book *Robot*, Hans Moravec lays out one proposal of how computers might affect the way in which humans address the notion of information, writing, "There is no content or meaning without selection. The realm of all possible worlds, infinitely immense in one point of view, is vacuous in another" (200). He goes on to toy with the example of a book that holds all possible information—one where the reader is provided with infinite situations and realities. "The book's content results entirely from the user's selections; the library has no information of its own to

contribute,” writes Moravec. (200) When technology is at the point that humans have access to everything, the notion of knowledge—of what is true and what is false—becomes obsolete because individual men’s selections will choose what becomes reality. One man’s truth is thus not necessarily another man’s truth. Therefore, man cannot look for objective data garnered from testing hypotheses on which to base hard conclusions. Instead, the world as perceived by his body will dictate which possibilities become realities, empowering the individual. Because of this drastic change that eliminates the notion of truths, systems that hold all possible knowledge will be recognized not as computers, but as translators. And in translation, the two parties talking to each other are the dominant figures, for their ideas—not the translator’s-- sustain the interaction.

It has been argued that increased access to information creates a kind of automatic machinery that runs men’s lives without ever allowing them a method of determining what is important. At first glance there appears to be merit in this claim because automation will increasingly remove tasks from man’s responsibilities, especially administrative ones. However, as suggested by post-modern philosopher Jean-Francois Lyotard, because of open access to knowledge, a new kind of information economics will begin to form—one which will allow humans to exert influence on the system that supposedly controls them. Lyotard theorizes that language will serve as the preferred commodity in this new economy, which consists of each person conducting “language games” with partners. While the computers will speak in all possible tongues, it will still remain the task of humans to determine what to say, giving them ultimate control.

Lyotard writes:

The system can and must encourage such movement to the extent that it combats its own entropy, the novelty of an unexpected “move,” with its correlative displacement of a partner or group of partners, can supply the system with that increased performativity it forever demands and consumes.

As in a game of chess, neither party—nor the system itself-- can totally predict what each person will say to another, injecting an element of randomness into an otherwise fully planned system. Indeed, even in a society run increasingly by machines, individuals will have an important role to play, in essence determining by their own free wills which variables take prominence in the societal consciousness. Therefore, the individual is empowered even as the system is strengthened.

While some would argue that the freedom provided by technology—the ability to control one’s reality—is an incredible gift, Matthew Arnold states in *Culture and Anarchy* that it is in fact a burden. He writes:

Perfection can never be reached without seeing things as they really are;
and it is to this, therefore, and to no machinery in the world, that we stick.
We insist that men should not mistake, as they are prone to mistake, their
natural taste for the bathos for a relish for the sublime.

Arnold believes that humans do not have the discipline to seek “sweetness and light,” even when given the means to do so. Rather, he believes that if man is given access to everything, he will cherish nothing and spend his days loafing in that which is pleasurable but not inspiring. Arnold makes an important assumption here that perfection exists and that it cannot be attained without a sense of reality. Lyotard would argue that

neither perfection nor objective reality exist, and Moravec would insist that both would become irrelevant as technology becomes more advanced. The problem may be that Arnold believes that life happens to man, eliciting a reaction from him. But technology is changing the order of things: as computers automate the world, man happens to life, challenging the system for a reaction to the individual.

How will man act in such an organization? Moravec suggests that by sharing a wealth of information, humanity will divide itself into sub-communities, thereby lowering the number of possible voices and giving each person more control. Using the Usenet system as an example, he states:

Regular contributors to particular “newsgroups” soon begin to recognize one another and develop characteristic interactions, likes, and dislikes. They formed factions that praised, recruited, condemned, and ostracized. When a newsgroup grew too large and too noisy, specialized subgroups were formed, reducing the original group’s population. (137)

There are several implications in Moravec’s analogy, all of which suggest that technology will push humanity away from ceaseless advancement. Firstly, because humans will diverge into subgroups, they will in doing so voluntarily restrict their access to data. By removing all these other viewpoints, man loses his opportunity to make judgments from a modern perspective. Only with all of the available data can he pursue scientific discovery, progress, and indisputable truth. Instead, because man will be primarily surrounded by his “tribe of common interest,” he must look inward for guidance. (Moravec 138) Furthermore, because these sub-groups are constantly splitting into more highly specified groups, “ostracizing” those who are not interested, Arnold’s

notion of a search for a universal high culture decomposes. Each sub-group will have its own culture, and because of the advanced nature of the technology, an individual can pick and choose which culture suits him best. Thus, free will—not society at large--determines culture. Therefore, free will takes a larger role in man's life as a direct result of technology, forcing him to contemplate his wants and desires because they matter more than ever before.

While Moravec suggests that people will embrace technology, Michael Chorost uses the deaf community in *Rebuilt* as evidence that they will in fact rebel against it. Either way, however, the result appears the same: technology will cause people to diverge into small communities based on their common traits, empowering the individual. Chorost talks about the differences between the signing deaf and hearing communities, writing, "I have seen signing deaf people imitate how hearing people behave, and they do it with relentless scorn and devastating mimicry. To them the faces and bodies of hearing people are wooden and inscrutable" (132). In this case, cochlear implants have created a palpable divide between two groups of deaf people-- technology alone is serving to separate two peoples who are essentially the same. One can make the argument, then, that technology serves to disintegrate our societal bonds. That may well be true, but in doing so it also places much more focus on the individual. Chorost's experience again provides a good example. Because he was in many ways unplugged from the world around him, he was forced to look internally for self-worth. For example, when he worked on his book, he would unplug his implant, removing his own sensory abilities; he could no longer rely on incoming data, but rather only on himself. He also became emboldened and frightened by his experience of being completely deaf for a

month, which suggests individual emotions will be strengthened if we rebel against machines. So whether humanity embraces or rebels against emerging technology, the results are similar: man will split into small sub-groups of common interest, forcing him to look inward for perspective.

Technology will revolutionize the way we live. Modern media, be it in the form of Star Wars' Galactic Empire, the uniform clothing in Star Trek, or the hive mind of the Matrix, portrays the future as being relatively devoid of individualism. But technology will serve to empower the single man, for he will define his own reality in a world where everything is possible. He will inject chaos into an ever more automatic system, thus exerting control. And, faced with the prospect of limitless knowledge, he will limit himself in a search for culture and identity. The dynamic between computers and their designers will, even as machines outpace their masters, serve to empower us all.

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